

**Abstract**

First and second functional circuit blocks (FCBs) control the operation of a clock circuits coupled thereto in dependence upon processing requirements of the FCBs as well as power consumption considerations. When the FCB is not processing data, the clock circuit coupled to that FCB has one of its clock signal frequency reduced or is disabled so that the FCB consumes significantly reduced amounts of electrical power. Through controlling clock frequency and enabling and disabling of the clock circuit, electrical power consumption of the FCB is advantageously reduced.